## MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

**Permitting and Compliance Division** 1520 E. Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901

> **Stimson Lumber Company Bonner Operation** P.O. Box 1120 **Bonner**, MT 59823

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		Method 5 and Method 9
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 Preconstruction Permitting	X		Permit #2806-05
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart Dc
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		No, Except for 40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart QQQQ
Major New Source Review (NSR)		X	
Prevention of Significant Deterioration (PSD)	X		Source is major but has not undergone PSD review
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring Plan	X		PM from Boiler #1, Appendix E
State Implementation Plan (SIP)	X		General SIP

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#### SECTION I. GENERAL INFORMATION

#### Α. **Purpose**

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the United States Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in Permit Application #OP2806-04 submitted on March 4, 2003, and Montana Air Quality Permit #2806-05 submitted on December 13, 2002, with additional submittals on October 6, 2003, and October 10, 2003. Additional information was provided in Permit Application #OP2806-02 submitted on September 9, 2002, and Permit Application #OP2806-03 submitted on October 6, 2003. Information was also provided in Permit Application #OP2806-01 and Preconstruction Permit #2806-04 submitted on July 6, 1999; with additional submittals on July 14, 1999; September 10, 1999; October 19, 1999; and December 7, 1999; the original application submitted by Stimson Lumber Company (Stimson) on July 12, 1995, with additional submittals on September 25, 1996, and April 30, 1997.

#### В. **Facility Description**

The Stimson facility in Bonner consists of both a studmill and a plywood mill. The studmill falls under Standard Industrial Classification (SIC) Code 2421 and includes a sawmill, drying kilns and planer. The plywood mill falls under SIC code 2436. Two boilers support the facility, a Riley-Stoker hog fuel fired boiler, which supplies steam to both mills, and a Nebraska natural gas fired boiler as a backup to the hog fuel boiler.

Stimson's Bonner facility is located in the NE¼ of Section 21, NW¼ of Section 22, Township 13 North, Range 18 West, of Missoula County. The facility is situated on the south bank of the Blackfoot River in Bonner, Montana.

#### C. **Facility Background Information**

The Bonner facility was originally constructed in the 1920's by the Anaconda Company and consisted of only a sawmill. Permit #41 was issued in 1969 for the construction of wood wastefired boiler #1. Emissions from the boiler are controlled with a wet scrubber. In 1972, U.S. Plywood, a division of Champion International, purchased the mill. In 1973, U.S. Plywood was issued Air Quality Permit #604-082773 for the construction of a plywood manufacturing plant. In 1974, the facility was issued Preconstruction Permit #795-031375 for the construction of a veneer gas incineration system, which routed the veneer dryer exhaust gas to the boiler for emissions control. In 1994, Stimson Lumber purchased the facility. Permit #2806-00 was issued for the transfer of ownership. Permit #2806-01 was issued in 1994 for the #2 wood-waste-fired boiler. This boiler was constructed in 1974 and permitted by Missoula County, but had not been incorporated into the permit. Emissions from this boiler are also controlled with a wet scrubber. Permit #2806-02 was issued in 1995 for the addition of a veneer scarfing unit to join short pieces of veneer into longer pieces. Permit #2806-03 was issued in 1997 for the replacement of the #2 wood-fired boiler with a Nebraska natural-gas-fired boiler.

Stimson's initial operating permit application was deemed administratively complete on July 12, 1995. Permit #**OP2806-00** was issued final and effective on September 4, 1998.

On July 6, 1999, Stimson submitted an application for a preconstruction and operating permit for

the Duratemp® Plywood Prime Line (Preconstruction Permit #2806-04 and Operating Permit #OP2806-01). In addition, Stimson also asked, in subsequent letters to the Department of Environmental Quality (Department), that testing requirements for some cyclones, the S08 Planer Baghouse #4, and the P08 Sander Baghouse be removed from the operating permit. In the interim, the Department had granted Stimson a nine-month extension to perform the required testing.

The Department asked Stimson to provide manufacturer's data to verify the emissions from the P08 Sander Baghouse. The P08 Sander Baghouse was designed in such a manner that a standard Method 5 test could not be performed without building some type of enclosure to test the baghouse. The P08 Sander Baghouse emissions do not exit through a standard stack, but are emitted through a series of vents in a 360-degree configuration. Finally, on December 7, 1999, the Department received a letter from Stimson that stated they had decided to proceed with the emissions testing in January 2000, after reviewing the manufacturer's performance specifications and some alterations made to the system since the original 1973 installation. Thus, Stimson had withdrawn their request to suspend testing on the P08 Sander Baghouse.

The Department granted Stimson's request to suspend semiannual Method 9 tests for the following sources: S08 Planer Baghouse #4, C01 Planer Shavings Cyclone, C03 Fines Pipe Cyclone, C06 Beauty Bark Cyclone, and C12 Carpenter Shop Cyclone. The S08 Planer Baghouse #4 is no longer on site, as the planer line, cyclone baghouse were sold, dismantled, and removed from the facility. All references to the S08 Planer Baghouse #4 were removed from OP2806-01. For the remaining cyclones, the Department added a statement to the operating permit that suspended Method 9 testing for those sources that are not operating. The C01 Planer Shavings Cyclone is located on top of the "A" frame fuel storage building and was an alternate for shavings; but is no longer connected to any ductwork. The C03 Fines Pipe Cyclone is also located on the "A" frame; but is not connected to any ductwork. The C06 Beauty Bark Cyclone is located on top of the beltfed bark bin and is not connected to any material-transporting ductwork. Finally, the Carpenter Shop Cyclone is no longer connected to any machinery with the movement of the table saw to the warehouse.

Stimson provided comments during the public comment period on the draft permit. The comments resulted in adding the C13 Rail Chip Cyclone and the F14 Rail Chip Surge Bin Loadout to the operating permit and deleting the C12 Carpenter Shop Cyclone from the permit. Permit #OP2806-01 was issued final and effective on May 14, 2000.

A portion of Missoula County is designated as a PM<sub>10</sub> non-attainment area. Stimson is located about 2 miles east of the non-attainment border. The Montana State Implementation Plan does not apply any operating restrictions to the Bonner facility.

Stimson was issued Permit #OP2806-02 final and effective on January 14, 2003. The permitting action was an administrative amendment based on a request submitted by Stimson on September 9, 2002, to change the responsible official for the facility. Dan Sweeney replaced Jeff Webber in that capacity.

On January 23, 2003, the Department issued Permit #2806-05 to Stimson for the relocation of various pieces of equipment from the Stimson Libby Mill to the Stimson Bonner Mill. Specifically, the permitting action included the addition of the following equipment to the permitted facility.

- One 18-Opening Press;
- Six pluggers with round table and strip saw;
- One spreader;
- One composer; and
- One 4-foot lathe.

TRD2806-04 4 Date of Decision: 07/28/04 Operation of the above-cited equipment increased Boiler #1 steam production demand by approximately 6,250 pounds per hour resulting in an increase in potential boiler emissions of all criteria pollutants, including an increase in carbon monoxide (CO) emissions of 23 tons per year. The Department determined that the proposed equipment would require an increase in steam demand not otherwise necessary absent the project. Thus, in effect, the proposed project debottlenecks (i.e. increase utilization of) Boiler #1 operations with a resulting increase in criteria pollutant emissions directly attributable to the project.

The increased steam utilization is most closely associated with the operation of the 18-opening press; therefore, the permitting action incorporated a maximum throughput limit for the press to ensure potential emissions do not exceed emission estimates analyzed for the permitting action.

On December 27, 2003, the Department issued Permit #OP2806-03 final and effective. The permitting action was an administrative amendment to Permit #OP2806-02 to update language currently stated in Section V.B.3 that requires identification of the methods used to determine compliance for each term or condition in the permit, and then to state whether those methods are "continuous or intermittent," and to list the compliance status of the term or condition in the permit. The new permit language requires determination if compliance is "continuous or intermittent." Permit #OP2806-03 replaced Permit #OP2806-02.

## D. Current Permitting Action #OP2806-04

On March 4, 2003, the Department received an application from Stimson for a Title V Operating Permit renewal. The current permit action includes the renewal of Stimson's Title V Operating Permit #OP2806-03 which expired on September 5, 2003. The permit action also updates the permit to include the equipment permitted in Permit #2806-05, and the Compliance Assurance Monitoring (CAM) plan submitted by Stimson as part of the complete permit renewal application.

On October 10, 2003, Stimson submitted a letter to the Department requesting inclusion of a de minimis modification for the installation of a Ply-Trim Line to Permit #OP2806-03. The new modification did not require a Montana Air Quality permit under ARM 17.8.745 as the change would not exceed the 15 tons per year de minimis threshold and would not increase the facility's potential to emit. However, the new cyclone would exceed the insignificant emitting unit threshold and therefore must be included in the Title V Operating Permit as a significant emitting unit. The permit language was also updated in the current permitting action. Permit #OP2806-04 will replace Permit #OP2806-03.

## E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. The checklist was completed on November 7, 2003.

## F. Compliance Designation

Stimson was inspected by the Department on August 12, 1996, September 18, 1997, September 14, 1998, November 15, 1999, November 15, 2001, July 26, 2002, July 18, 2002, and August 18, 2003. On all these occasions, the facility was found to be in compliance with all applicable requirements and limitations.

Since Stimson acquired the Bonner facility in 1994 there have been six documented violations of

the 20% opacity limit for the #1 wood-fired boiler; the last of which occurred in August 1997. A consent decree, which covered the first four violations, was signed between Stimson and the Department on December 5, 1996, which required Stimson to perform inspections and modifications to the #1 boiler and scrubber to increase the particulate control. In response to the opacity violations, and subsequent order, Stimson installed an automated control system on the boiler and has rebuilt the internals of the scrubber. The actions required by the consent decree have been completed.

On August 5, 1997 the Department air quality inspector again documented a violation of the 20% opacity limit on the #1 boiler. Also, an inspector from Missoula County documented a violation of the same limit on August 7, 1997. Subsequent to this violation, Stimson discovered the damper to the scrubber bypass was not completely shut, as had been previously thought. Both consultants and the company, during the inspections required by the consent decree, had overlooked this. A winch was placed on the damper arm and the damper was closed completely. This action caused a reduction in both opacity and temperature of the boiler stack gases, indicating that some bypassing of the scrubber had been occurring.

The Department considers the matter of the opacity violations of August 5 and August 7, 1997 resolved and will not take further action. Stimson is considered by the Department to be in compliance with all applicable requirements at the time of issuance of this permit.

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#### SECTION II. SUMMARY OF EMISSION UNITS

#### Α. **Facility Process Description**

Stimson's Bonner operation consists of both a plywood mill and a stud-grade lumber mill. The two mills are essentially separate, other than sharing the same hog-fuel boiler as a steam source. Stimson also operates two waste-water treatment plants and a landfill at the Bonner site. One water treatment plant handles waste water from the plywood plant and the other handles water from the remainder of the plant, as well as the discharge from the city of Bonner. The landfill is a class III landfill and accepts only log yard waste.

The sawmill includes debarkers, saws, chippers, drying kilns, planers, and product storage. The byproducts of lumber manufacturing are sawdust, wood chips, planer shavings, and hog fuel. These byproducts may be burned in the hog-fuel boiler or stored in bins until the material is sold and transferred off site.

The plywood plant uses raw logs, which are first debarked and cut to length. The logs are soaked in hot water baths prior to being lathed into veneer sheets. The veneer sheets are then dried, using steam from the hog-fuel boiler and "layed-up" into the plywood panels using foam glue. Defects in the veneer can be removed and plugged with the common football shaped inserts. A scarfing machine can also be used to join shorter sheets of veneer into longer sheets. Prepresses, and then the large plywood presses, provide the necessary pressure and steam heat to bond the veneer into plywood. Defects in the plywood face are filled with patching compound and some species of wood are sized with urea to prevent the surface from fuzzing prior to the sheets being sanded, trimmed, bundled and stored for shipment. By-products from the plywood process are essentially the same as those from the stud mill.

Steam for the facility is provided by a Riley-Stoker hog-fuel boiler rated at 200,000 lbs of steam per hour. The boiler's air intake includes the exhaust from the veneer dryers to control particulate and VOC emissions from the dryers and the boiler exhaust is controlled by a wet scrubber. A Nebraska natural gas-fired boiler rated at 70,000 lbs of steam per hour is used as a backup. Nitrogen oxide emissions from this boiler are controlled through the use of flue gas recirculation.

#### В. **Emission Units and Pollution Control Device Identification**

EU ID	Description	Pollution Control Device/Practice
S01	Sawmill Log Debarker	None
S02	Sawmill Bucking Saws	None
S03	Sawmill Hog Fuel and Chips Handling	None
S04	Chip Storage Pile	None
S05	Sawmill Building	Building provides some PM control
S06	Lumber Dry Kilns	None
S07	Planer Baghouse #3	Baghouse is control device
P01	Plywood Log Debarker	None
P02	Plywood Mill Bucking Saws	None
P03	Plywood Mill Hog Fuel and Chips Handling	None
P04	Lathe Rejects Screening	None
P05	Plywood Building	None
P06	Plywood Layup Baghouse	Baghouse is control device
P07	Hog Press Sawline Baghouse	Baghouse is control device

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EU ID	Description	Pollution Control Device/Practice
P08	Sander Baghouse	Baghouse is control device
P09	Saw Baghouse	Baghouse is control device
P10	Plywood Press Vent	None
P11	Knife Grinding Room	None
P12	Plywood Veneer Dryers	Dryer Exhaust Gas Routed to Boiler
P13	Plywood Prime Line (Duratemp® Prime Line)	None
P14	18-Opening Press	None
B01	Boiler #1 (Hog fuel fired)	Wet Scrubber
B03	Boiler #3 (Natural gas fired)	Flue gas recirculation
F01	Beauty Bark Processing	None
F02	Landfill	None
F03	Outdoor Fuel Storage Pile	None
F04	Indoor Fuel Storage Pile	None
F05	A-frame Shavings & Bark Bin Loadout	None
F06	Plywood Chip Bin loadout	None
F08	Log Yard Leveling	None
F09	Waste Water Treatment Plant	None
F10	#1 Baghouse on A-frame	Baghouse is control device
F11	#2 Baghouse on A-frame	Baghouse is control device
F12	Boiler Sander Dust Baghouse	Baghouse is control device
F13	Fugitive Emissions: Vehicle Traffic	Unpaved roads are watered as needed to control dust
F14	Rail Chip Surge Bin Loadout	None
H01	Vehicle Fueling Tanks (Gasoline - 1000 gal, Diesel - 12,000; 10,000; 8000; 8000 and 500 gal	Submerged Fill Pipes
H03	Maintenance Activities	None
C01	Planer Shavings Cyclone (not in use)	Cyclone is control device
C02	Plywood Fines Cyclone	Cyclone is control device
C03	Fines Pipe Cyclone (not in use)	Cyclone is control device
C04	Shavings Bin Cyclone	Cyclone is control device
C05	Fines Pipe Cyclone (not in use)	Cyclone is control device
C06	Beauty Bark Bin Cyclone (not in use)	Cyclone is control device
C07	Cyclone for Auxiliary Fuel System	Cyclone is control device
C08	Plywood Fines Bin Cyclone	Cyclone is control device
C09	Fishtail Saw Cyclone above #1 Surge Bin	Cyclone is control device
C10	Processor Chips Cyclone above #3 Surge bin	Cyclone is control device
C11	Sawmill Chips Cyclone	Cyclone is control device
C13	Rail Chip Cyclone	Cyclone is control device
C14	Chipper Cyclone	Cyclone is control device
C15	Ply-Trim Line Cyclone	Cyclone is control device

In submitting their original operating permit application, Stimson did not list the veneer dryers as an emissions unit because the exhaust is routed to the wood-fired boiler for incineration. However, the dryers do have applicable requirements and, therefore, must be addressed separately.

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emission unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by any applicable requirement other than a generally applicable requirement. The list of insignificant emitting units at the Stimson facility includes the Sawmill Log Debarker (S01), the Sawmill Building (S05), the Knife Grinding Room (P11), the Landfill (F02), the Indoor and Outdoor Fuel Storage Piles (F03and F04), the Logyard Leveling (F08), and the Waste Water Treatment Plants (F09).

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#### **SECTION III. PERMIT TERMS**

#### A. Emission Limits and Standards

### #1 Boiler (B01)

The Department has determined that the emission limits that apply to the #1 boiler are both 0.15 gr/dscf from Montana Air Quality Permit #2606-03 and the limit as calculated from the fuel burning equation in ARM 17.8.309 - Particulate Matter, Fuel Burning Equipment. Because of the fluctuations in flue gas flow rate, in relation to heat input level, the Department is not able to verify one limit as being more stringent; therefore, both shall apply. The fuel burning equation is:

 $E=1.026*H^{-0.233}$ 

Where H is the heat input in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu.

For indicating compliance with the particulate and opacity limits, the Department has added an additional requirement to monitor and record the differential pressure across the wet scrubber, which controls emissions from the wood-fired boiler. Also added is the requirement to monitor the differential pressure in the duct-routing veneer dryer exhaust gas to the boiler to ensure that the veneer gas incineration system is operating properly.

## **Boiler #3 (B3)**

The emission limits for this natural gas-fired boiler are as specified in Stimson's Montana Air Quality Permit #2806-04.

### Veneer Dryers (P12)

Because the emissions from the veneer dryers are routed to the boiler for control, no emission limits apply to the dryers themselves. The only requirement is that the veneer dryer exhaust gas incineration system is in operation whenever the dryers are operating.

### Plywood Layup Baghouse (P06)

The emission limit for the Plywood Layup Baghouse is as specified in Montana Air Quality Permit #2806-04.

## Plywood Prime Line (Duratemp® Prime Line) (P13)

The emission limit for the Plywood Layup Baghouse is as specified in Montana Air Quality Permit #2806-04.

### 18-Opening Press (P14)

The emission limit for the 18-Opening Press is as specified in Montana Air Quality Permit #2806-05.

No other emission units at the facility contain source specific emissions limits or conditions.

#### В. **Stratospheric Ozone Depleting Substances**

Stimson does not manufacture, sell, distribute, or use in the manufacturing of a product, any stratospheric ozone-depleting substances. Therefore, the 1990 Clean Air Act, as amended, Sections 601-608, do not apply to the facility, except that air conditioning and fire extinguishers, or other equipment containing Class I or Class II substances, must be serviced by certified repair persons to ensure that the substances are recycled or destroyed appropriately.

#### C. **Monitoring and Testing Requirements**

The requirement for testing, monitoring, record keeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor for all emissions units. Furthermore, it does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for an emissions unit is not threatened by lack of regular monitoring, and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (i.e., no monitoring) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring and/or record keeping for all generally applicable requirements such as ARM 17.8.304, 308, 310, 322, and 324.

The information obtained from the monitoring and record keeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards. If it is determined, through testing using test methods identified in the Montana Source Testing Protocol, that Stimson is out of compliance with any applicable requirement, Stimson will not be shielded from an enforcement action even if the required monitoring methods listed in the permit indicate compliance with the applicable requirement.

For example, Method 5 "as required by the Department" is the monitoring requirement for ARM 17.8.310 (particulate emissions from process weight) for the process cyclones. If the Department required a Method 5 test on one of these cyclones and it was found to be out of compliance with the emission limit, then the Department would have cause for an enforcement action. Similarly, if Stimson performed visual surveys for the raw material handling points as required by the permit and determined, based on the performance of the visual surveys, that Stimson was in compliance with ARM 17.8.308, but an inspector performed a Method 9 test and determined that there was an opacity violation, then Stimson would be subject to enforcement even though the monitoring indicated compliance.

The operating permit may not necessarily require testing for all sources, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm compliance status. All compliance testing must be performed in compliance with the Montana Source Test Protocol and Procedures Manual.

### **Boiler #1 (B01)**

Boiler #1 was last tested for particulate in October 2001. The Department determined that a Reference Method 9 Opacity Test at least once every six months and a Reference Method 5 Particulate test every 4 years, as well as hourly monitoring of the differential pressure across the wet scrubber, is sufficient to demonstrate compliance with the applicable opacity and particulate limits.

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### **Boiler #3 (B03)**

Because this natural gas-fired boiler is used only as a backup to Boiler #1 and will not be used on a continuous basis, the Department has not required any ongoing testing of this source. The use of only natural gas as a fuel is considered sufficient to demonstrate compliance with the opacity, particulate and sulfur in fuel limitations. This does not preclude the Department from initiating enforcement proceedings if reference method testing indicates that the source is in violation. Reference Method testing for NOx and CO may be required if the Department feels it is necessary.

### Veneer Dryers (P12)

The veneer dryers are not vented directly to the atmosphere but are vented to the Boiler #1 for VOC and particulate. Therefore, no direct testing of the dryer exhaust is required. The Department has determined that hourly monitoring of the exhaust duct pressure is sufficient to ensure that the system is operational.

### Plywood Layup Baghouse (P06)

The Department has determined that opacity testing every six months and particulate testing every four years are sufficient to demonstrate compliance with the applicable requirements for the baghouse.

## Hog Fuel and Chips Handling - Plywood Mill (P03) and Sawmill (S03)

The fuel handling system can be a significant source of fugitive emissions at the Stimson facility. To ensure compliance with the opacity limitations, the Department has required Stimson to perform weekly visual surveys of the facility. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stimson shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Stimson shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stimson of a liability for a violation determined using Method 9.

If visual surveys are not conducted once per calendar week as specified above during the reporting period. Stimson shall perform a Method 9 source test for the visible emissions from the affected unit. Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading meets or exceeds the applicable limit, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time. Stimson is required to make a conscious effort to locate and mitigate sources of fugitive emissions.

## Hog Press Sawline Baghouse (P07) and Sander Baghouse (P08)

The Hog Press Sawline Baghouse and the Sander Baghouse have not been required to perform testing on an ongoing basis in the past. However, these are the two largest baghouses at the Bonner facility, with design airflows of 48,200 scfm and potential uncontrolled particulate emissions of 54 and 96 tons per year. Based on the Department's testing policy, particulate testing every four years is warranted. The Department determined this testing schedule, along

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Miscellaneous Baghouses - Planer Baghouse #3 (S07), Planer Baghouse #4 (S08), Plywood Saw Baghouse (P09), #1 A-frame Baghouse (F10), #2 A-frame Baghouse (F-11), Boiler Sander Dust Baghouse (F12)

These baghouses all have potential uncontrolled emission rates of five to ten tons per year and are considered minor sources at the facility. The Department has determined that ongoing particulate testing is not warranted for these sources and that monthly visual surveys are sufficient to demonstrate continuing compliance. This does not preclude the Department from requiring Stimson to perform a source test on any of these sources if the test is warranted.

Material Handling Cyclones - Planer Shavings Cyclone (C01), Plywood Fines Cyclone (C02), Fines Pipe Cyclone (C03), Shavings Bin Cyclone (C04), Fines Pipe Cyclone (C05), Beauty Bark Bin Cyclone (C06), Auxiliary Fuel System Cyclone (C07), Plywood Fines Bin Cyclone (C08), Fishtail Saw Cyclone (C09), Processor Chips Cyclone (C10), Sawmill Chips Cyclone (C11), (C13) Rail Chip Cyclone

Emissions from cyclones have been shown to be fairly consistent, assuming that the primary air mover is operating. Excess emissions can occur, but they typically don't occur suddenly as with the failure of a bag in a baghouse or the loss of liquid level in a scrubber. Failure occurs gradually when erosion over a longer period of time causes a breach of the exterior shell or a failure of an internal component. The Department determined that semiannual Method 9 visual emissions observations are sufficient to monitor compliance with the opacity and particulate limitations.

The Department also determined that regularly scheduled particulate testing is not required. However, the Department reserves the right to require Stimson to perform particulate testing if there is indication of excess particulate loading.

### **Fugitive Emissions From Vehicle Traffic (F13)**

Fugitive emissions from vehicles can be a significant source of fugitive emissions at the Stimson facility. To ensure compliance with the opacity limitations, the Department has required Stimson to perform weekly visual surveys of the facility. For the purpose of the survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stimson shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Stimson shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stimson of a liability for a violation determined using Method 9. Stimson is required to make a conscious effort to locate and mitigate sources of fugitive emissions.

### **Vehicle Fueling Tanks**

Emissions from the vehicle fueling tanks are subject to the general opacity limit of 20%. Stimson is required to load the gasoline into the stationary tanks through a permanent submerged fill pipe, unless the tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1).

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### **Fugitive Emissions – Plant Wide Fuel Combustion**

Stimson is required to burn only liquid or solid fuels containing sulfur less than 1 pound per million Btu fired. The Department determined the facility must burn only gasoline and diesel obtained from licensed petroleum distributors, which meet the sulfur in fuel requirements.

### Plywood Prime Line (Duratemp® Prime Line) (P13)

This source is subject to general opacity and a VOC emission limit. Method 9 testing for this source is not feasible. Furthermore, there is a small likelihood that the Plywood Prime Line would ever violate the standard. The Department determined that using only water-based pigment coatings for all coating processes associated with the Duratemp® Prime Line and keeping records will suffice for verifying compliance with the VOC emission limit.

## **18-Opening Press**

The 18-Opening Press and the Spreader are specific to the medium density overlay process. The operation of this equipment increases Boiler #1 steam production demand by approximately 6,250 pounds per hour resulting in an increase in potential boiler emissions of all criteria pollutants, including an increase in carbon monoxide emissions of 23 tons per year. The Department determined that because of the increased steam utilization, a maximum throughput limit for the press will ensure potential emissions do not exceed emission estimates analyzed for Permitting Action #2806-05.

Miscellaneous Minor sources - Plywood Log Debarker (P01), Sawmill Bucking Saws (S02), Plywood Bucking Saws (P02), Dry Kilns (S06), Lathe Rejects Screening (P04), Plywood Building (P05), Plywood Press Vent (P10), Beauty Bark Processing (F01), A-Frame Shavings and Bark Bin Loadout (F05), Plywood Chip Bin Loadout (F06), (F14) Rail Chip Surge Bin Loadout

These sources are subject only to the general opacity and process weight particulate limits and are minor contributors to the overall particulate loading from the facility. Method 5 testing for particulate is not feasible on these sources; therefore, the Department has determined that weekly visual surveys and normal operations are sufficient to monitor compliance with the applicable requirements.

#### D. **Recordkeeping Requirements**

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least five years following the date of the generation of the record.

#### E. **Reporting Requirements**

The reporting requirements are included in the permit for each emissions unit and Section V-General Conditions of the operating permit explains the reporting requirements. However, the permittee is required to submit semiannual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The report will include a list of all emission limits and monitoring deviations, the reason for any deviation, and the corrective action as a result of the deviation.

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## F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in the *Missoulian* newspaper on March 26, 2004. The Department will provide a 30-day public comment period from March 26, 2004, through April 27, 2004, on the draft operating permit. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process.

## G. Draft Permit Comments: Permit #OP2806-04

## **Summary of Public Comments**

Person/Group	Comment	Department Response
Commenting		
Tony	EU #P10, the plywood press vents, are uncontrolled.	The emissions from the plywood press vents
Tweedale/MT		are minor sources of VOC emissions
Coalition for	Flu Gas Recirculation as control for the Nebraska natural	The installation of the natural gas fired
Health,	gas-fired back-up boiler EU #B03.	back-up boiler (Permit 2806-03 final on
Environmental &		6/25/97) did not cause a net emissions
Economic Rights		increase greater than significant levels and
(CHEER)		therefore did not require PSD review. A
		complete BACT analysis was conducted and
		appropriate controls selected.
	Applicability of CAM to the back-up boiler	The back-up boiler is not affected by CAM
		because it does not meet all 3 criteria in
		order for CAM to apply
	CAM data collection requirements.	The Department will not require a change in
		the facility's data collection frequency in the
		CAM Plan for the main boiler. The
		facility's main boiler does not fall into CAM
		4/hour data collection requirements.
	Boiler used as control for the veneer wood dryer should be	The boiler used as control for the veneer
	classified as an incinerator.	wood dryer does not meet the definition of
		an incinerator in Montana. Also, the veneer
		dryer would not be considered an
		incinerator under the EPA's definition of
		incinerator.
	Weed out vague language	The Department continually works on
		improving unenforceable language (see EPA
		comments)

## **Summary of Permittee Comments**

Permit Reference	Permittee Comment	Department Response
Facility Wide Cond	tions	
A.11	Discussion and review of this requirement has identified that it is only applicable to the plywood operation and it should not be listed as a Facility Wide Condition. Plywood operation systems covered by this requirement are covered under specific source limitations and requirements in the	The Department agrees that this reference does not belong in the Facility Wide Conditions. Stimson's Montana Air Quality Permit contains a federally enforceable condition requiring pneumatic conveying systems for sander dust and sawdust to be equipped with bag filter collectors in the Plywood Manufacturing Plant. The condition, therefore, should be placed in the Title V Operating Permit in
A.13	permit.  Stimson Lumber Company did not renew the Annual Asbestos Abatement Permit in favor of individual permitting of abatement projects through a licensed vendor.	sections relating to the Plywood Manufacturing Plant.  The Department removed this condition based on the fact that Stimson no longer possesses an Asbestos Abatement Permit.

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Boiler #1		
B.1	The language in this condition related to the maximum average opacity for four minutes should read the same as the limitations established in condition A.2 which reads "a minimum opacity of 60% is permissible for not more than one four minute period in any 60 consecutive minutes.  Or Sources – Compliance Demonstration  This first sentence of condition L.2 describes a visual survey frequency of monthly under compliance demonstration.	This change has been made.  The Department made this change in the Table.
	Consistent language is the permit suggests that the chart frequency should read weekly.	
	e (P13) – Compliance Demonstration	
N.5	As discussed with (the Department), our monthly VOC calculation is based on paint inventory. Usage is determined by subtracting the ending inventory from the sum of the beginning inventory and deliveries during the month. The VOC calculations are then based on the manufacturer's Purchasers Report of Hazardous Material received at the end of each month. References to the date, primer application rate, operator's initials, and calculations based on application rate are not applicable using the inventory-based calculation.	The Department recognizes and approves of the method used by Stimson and changed the language in condition N.5
18-Opening Press (		[m. n
Section O	A Method 9 reading is not applicable at this location because the press is located inside the Plywood building adjacent to four other plywood presses listed in the permit. Plywood Press Vents above the presses are listed as sources and are covered by applicable conditions.	The Department removed Method 9 requirements from Section O of this permit. A Method 9 is not appropriate for the plywood press; however, the plywood press vents, located above the plywood press, are subject to all applicable requirements.

# **Summary of EPA Comments**

EPA Comment	Department Response
In Sections C, H, I, and K the tables have the compliance	The Department and EPA had not finalized language at the
demonstration frequency of "As required by the Department."	time of permit issuance. However, language has been agreed
EPA and MDEQ have been discussing the use of this	upon, and has been updated in the proposed Permit #OP2806-
language, so if we finalize our discussion the results should be	04.
put in this permit. Since this is a permit in public comment,	
there is some time to address this issue.	

## SECTION IV. NON-APPLICABLE REQUIREMENTS ANALYSIS

Stimson Lumber Company requested a permit shield from all requirements that were identified as non-applicable in its permit application. Section IV of the operating permit "Non-applicable Requirements" contains the requirements that the Department determined were non-applicable. The following table summarizes the requirements Stimson identified as non-applicable in the permit application, but will not be included in the operating permit as non-applicable. The table includes both the applicable requirement and reason that the Department did not identify this requirement as non-applicable.

Applicable Requirement	Reason(s) for Not Including in Permit
40 CFR 61 Subpart A – General Provisions 40 CFR 63 Subpart A – General Provisions	These federal regulations consist of an applicability statement. These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
ARM 17.8.340 – Standards of Performance for New Stationary Sources	This rule incorporates the requirements of 40 CFR Part 60. The Nebraska boiler is subject to the requirements of 40 CFR Part 60 Subpart Dc

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### SECTION V. FUTURE PERMIT CONSIDERATIONS

#### Α. **MACT Standards**

Stimson submitted a Part 1 Application for Case-by-Case MACT Determination on May 13, 2002. Two potentially applicable MACT rules were identified. These are 40 CFR 63, Subpart DDDDD - Institutional Boilers and 40 CFR 63, Subpart DDDD - Process Heaters and Plywood and Composite Wood Products Manufacturing. On September 17. 2003, Stimson notified the Department that the Bonner Facility was subject to 40 CFR 63, Subpart OOOO – Surface Coating of Wood Building Products. The compliance date for Subpart QQQQ is May 28, 2006.

#### В. **NESHAP Standards**

As of the date of issuance of this permit, the Department is not aware of any future NESHAPS standards that may be promulgated that will affect this facility.

#### C. **NSPS Standards**

As of the date of issuance of this permit, the Department is not aware of any future NSPS standards that may be promulgated that would affect this facility.

#### D. **Risk Management Plan**

As of the date of issuance of this permit, this facility does not have any substance listed in 40 CFR 68.115 or 40 CFR 68.130 that exceeds the minimum threshold quantities. Consequently, this facility is not required to submit a Risk Management Plan.

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